

Figure 4

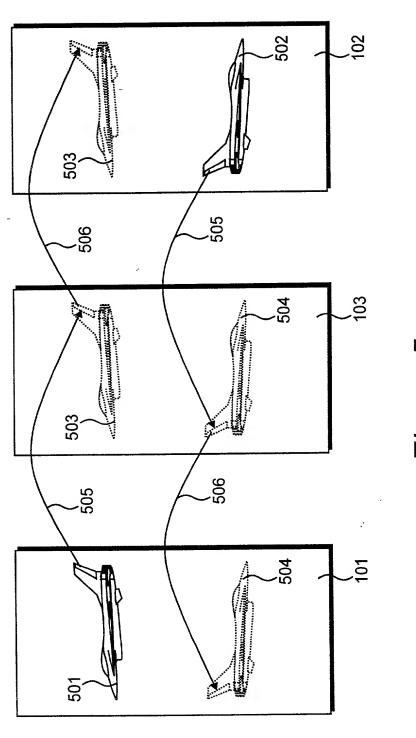


Figure 5

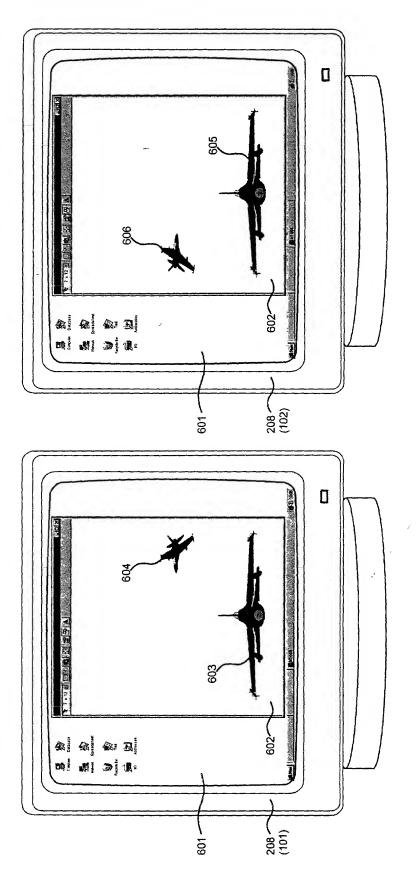
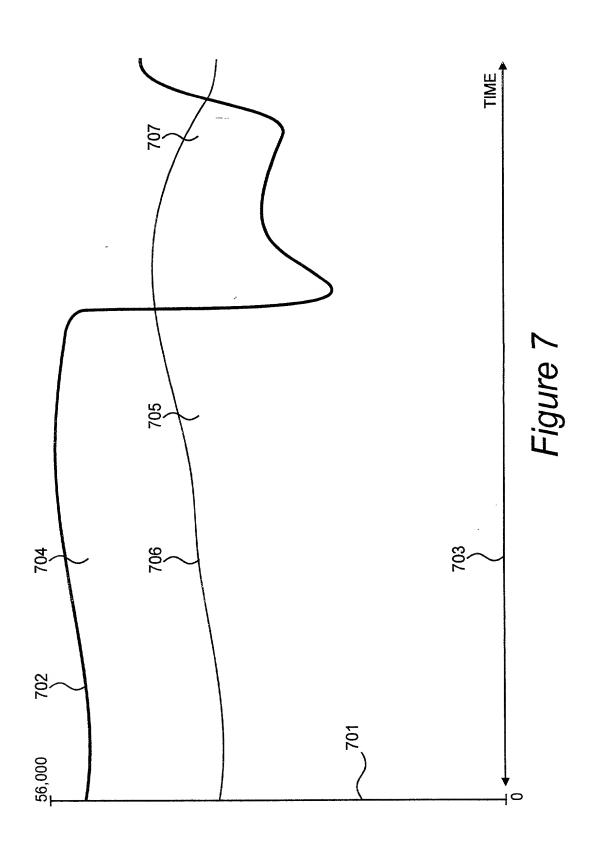


Figure 6



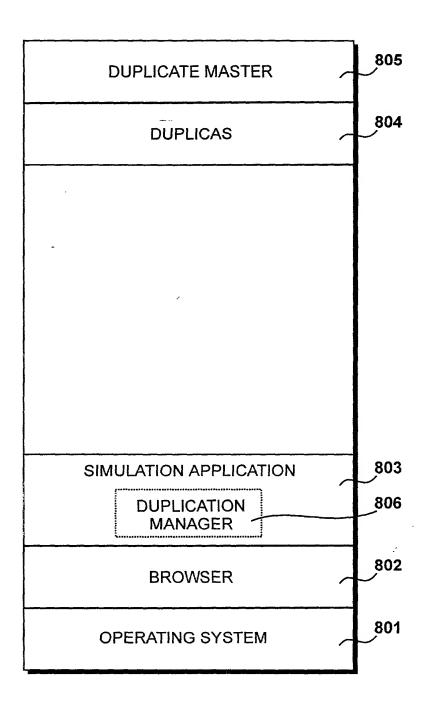


Figure 8

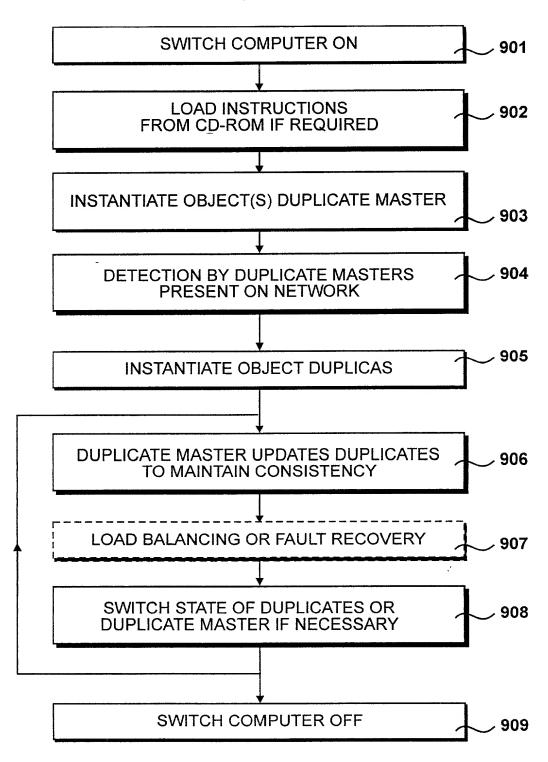


Figure 9

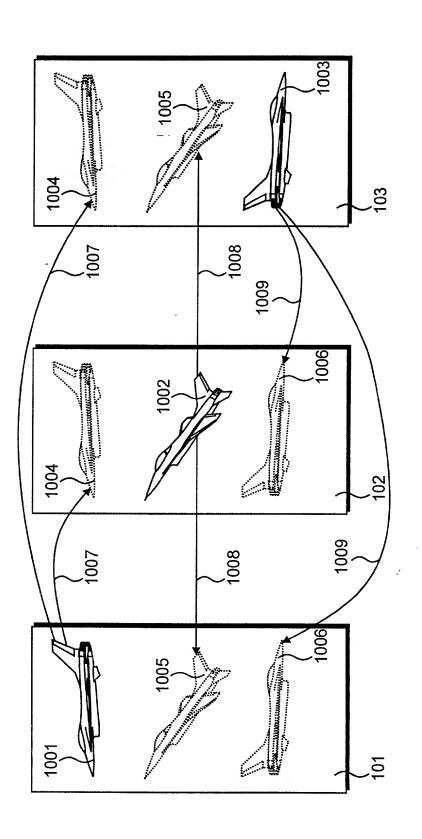


Figure 10

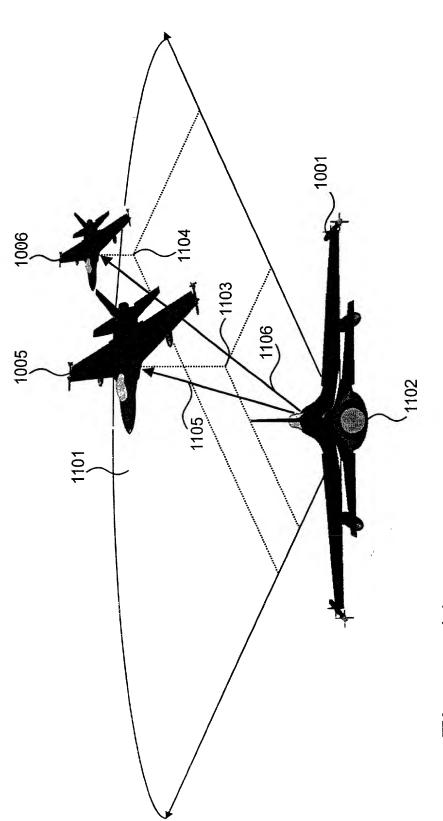


Figure 11

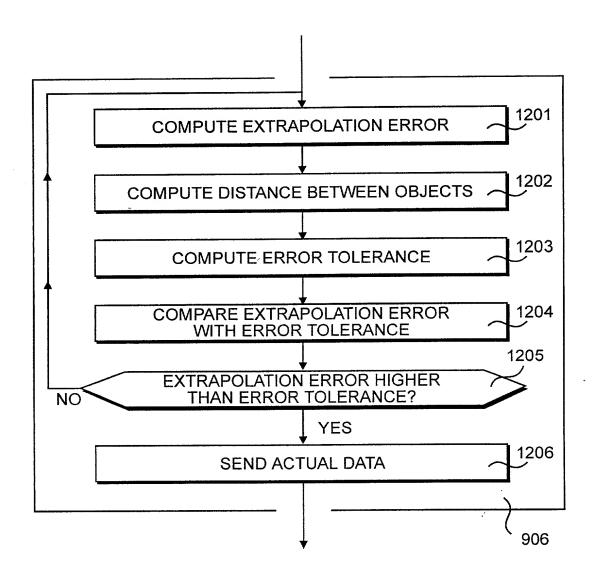


Figure 12

1301
$$E = \left[\sum_{i=1}^{n} (x_i - x_i')^2 \right]^{\frac{1}{2}}$$

E = extrapolation error for x data

x =actual value of variable x at local terminal

x = extrapolated value of variable x at remote terminal

1302
$$Z = \left[\sum_{i=1}^{n} X_{Duplica} - X'_{Observer} \right]^{\frac{1}{2}}$$

Z = distance between the observer and the duplica

x =actual value of variable xat local terminal

x' = extrapolated value of variable x at remote terminal

T = error tolerance

Z = distance between the observer and the duplica
dConstant = parameter for absolute minimum error tolerance
dLinear = coefficient for linear relationship between Z and T
dQuadratic = coefficient for quadratic relationship between Z and T

Figure 13

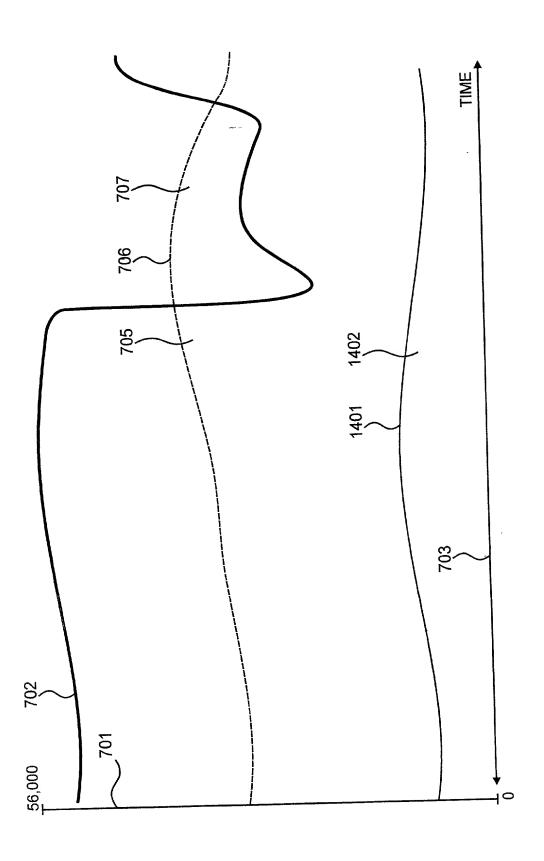


Figure 14

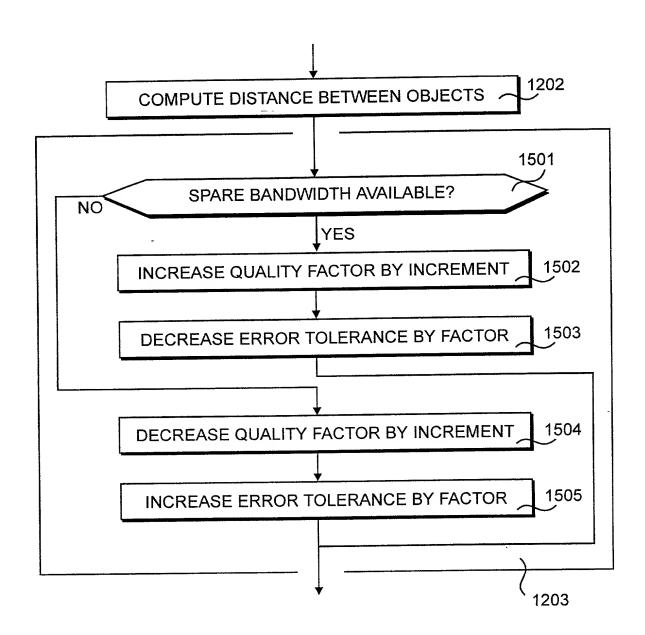


Figure 15

```
T = dConstant +[dLinear x \left(\frac{Z}{Q}\right)]+[dQuadratic x \left(\frac{Z}{Q}\right)^2]

T = error tolerance
Z = distance between the observer and the duplica dConstant = parameter for absolute minimum error tolerance dLinear = coefficient for linear relationship between Z and T dQuadratic = coefficient for quadratic relationship between Z and T quality factor
```

Figure 16

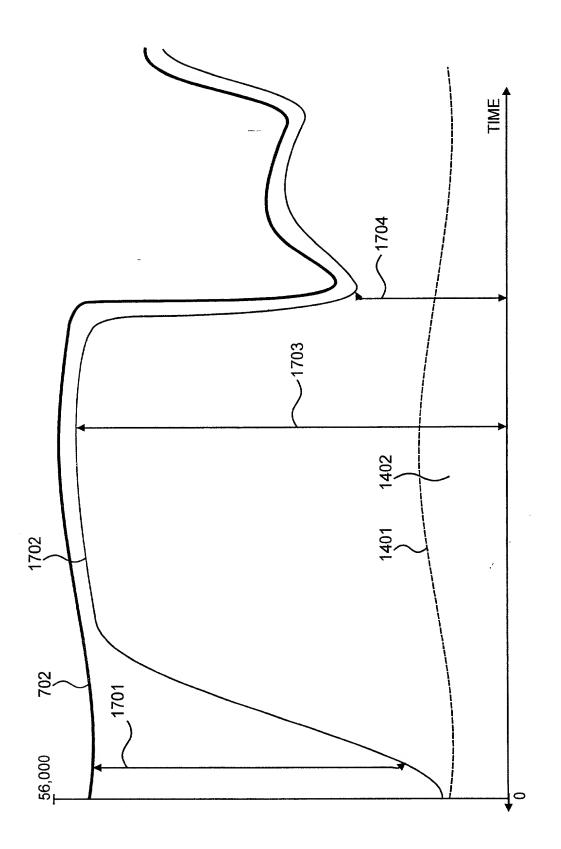


Figure 17

18/18

